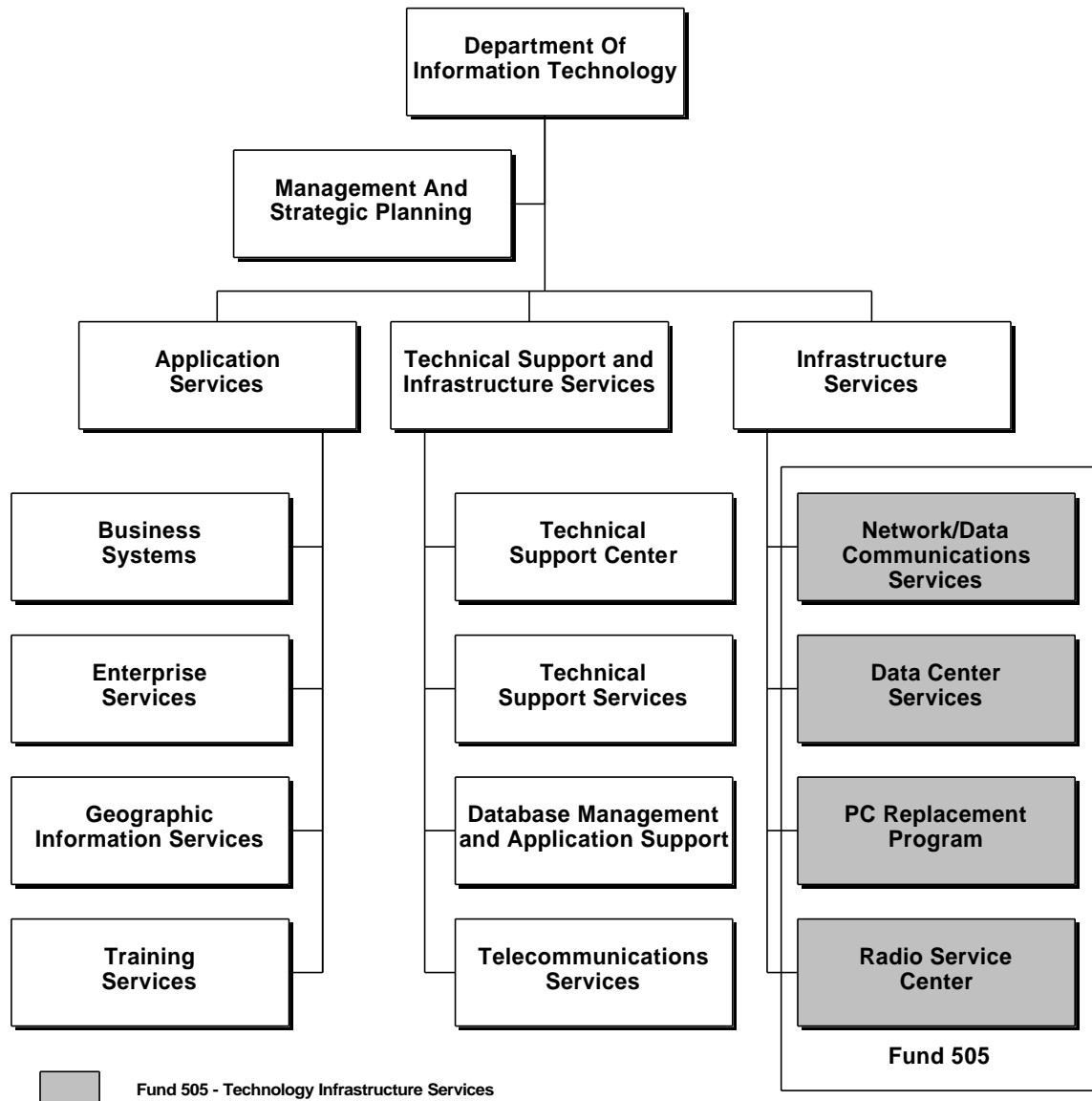


DEPARTMENT OF INFORMATION TECHNOLOGY

FUND 505, TECHNOLOGY INFRASTRUCTURE SERVICES



FUND 505

TECHNOLOGY INFRASTRUCTURE SERVICES

Agency Position Summary

Fund 001:	219	Regular Positions (2)	/	219.0	Regular Staff Years (2.0)
Fund 505:	<u>66</u>	Regular Positions	/	<u>66.0</u>	Regular Staff Years
	285	Total Positions (2)		285.0	Total Staff Years (2.0)

Position Detail Information

MANAGEMENT AND STRATEGIC PLANNING

Management, Administration & Planning

1	Director of Info. Technology
1	Asst. Director of Info. Tech.
1	Info. Tech. Program Director II
3	Info. Tech. Program Directors I
1	Info. Tech. Program Manager I
1	Fiscal Administrator
1	Business Analyst III
1	Accountant II
1	Management Analyst II
1	Management Analyst I
3	Administrative Aides
1	Secretary III
2	Secretaries II
1	Accounting Technician
3	Account Clerks II
1	Clerk Typist II
1	Info. Security Manager
1	Info. Systems Sec. Officer (1)
1	Info. Security Analyst III (1)
1	Info. Security Analyst II
<u>2</u>	Info. Security Analysts I
29	Positions (2)
29.0	Staff Years (2.0)

APPLICATION SERVICES

Business Systems

1	Info. Tech. Program Director II
3	Info. Tech. Program Managers II
2	Management Analyst IV
1	Network/Telecom. Analyst II
17	Programmer Analysts IV
15	Programmer Analysts III
<u>21</u>	Programmer Analysts II
60	Positions
60.0	Staff Years

APPLICATION SERVICES (CON'T)

Enterprise Services

1	Info. Tech. Program Director II
1	Info. Tech. Program Director I
3	Info. Tech. Program Managers II
1	Internet/Intranet Architect IV
3	Internet/Intranet Architects III
4	Internet/Intranet Architects II
10	Programmer Analysts IV
12	Programmer Analysts III
9	Programmer Analysts II
<u>1</u>	Programmer Analyst I
45	Positions
45.0	Staff Years

Geographic Information Services

1	Info. Tech. Program Manager II
1	Network/Telecom. Analyst III
1	Geo. Info. Spatial Analyst IV
2	Geo. Info. Spatial Analysts III
4	Geo. Info. Spatial Analysts II
1	Geo. Info. Spatial Analyst I
1	Engineer III
1	Geo. Info. Sys. Tech. Supervisor
<u>8</u>	Geo. Info. Sys. Technicians
20	Positions
20.0	Staff Years

Training Services

1	Info. Tech. Program Manager I
1	Business Analyst III
<u>5</u>	Business Analysts II
7	Positions
7.0	Staff Years

FUND 505

TECHNOLOGY INFRASTRUCTURE SERVICES

TECHNICAL SUPPORT AND INFRASTRUCTURE SERVICES

Technical Support Center

1	Info. Tech. Program Manager I
5	Info. Tech. Technicians III
2	Info. Tech. Educators III
<u>2</u>	Info. Tech. Technicians II
10	Positions
10.0	Staff Years

Technical Support Services

1	Info. Tech. Program Manager II
1	Network/Telecom. Analyst IV
3	Network/Telecom. Analysts III
10	Network/Telecom. Analysts II
1	Systems Programmer II
5	Info. Tech. Technicians II
<u>1</u>	Programmer Analyst II
22	Positions
22.0	Staff Years

Database Management & Application Support

1	Info. Tech. Program Manager I
3	Database Administrators III
3	Database Administrators II
1	Network/Telecom. Analyst III
1	Inventory Management Supervisor
1	Data Analyst III
<u>1</u>	Data Analyst II
11	Positions
11.0	Staff Years

Telecommunications Services

1	Info. Tech. Program Manager II
2	Network/Telecom. Analysts IV
3	Network/Telecom. Analysts III
4	Network/Telecom. Analysts II
2	Info. Tech. Technicians III
<u>3</u>	Info. Tech. Technicians II
15	Positions
15.0	Staff Years

INFRASTRUCTURE SERVICES

Network/Data Communication Services

1	Info. Tech. Program Director II
1	Computer Scheduler
2	Network/Telecom Analysts IV
6	Network/Telecom Analysts III
3	Network/Telecom Analysts II
<u>1</u>	Network/Telecom Analyst I
14	Positions
14.0	Staff Years

Data Center Services

1	Info. Tech. Program Director I
2	Info. Tech. Program Managers II
4	Systems Programmers III
6	Systems Programmers II
4	Systems Programmers I
1	Programmer Analyst III
1	Programmer Analyst II
1	Programmer Analyst I
1	Network/Telecom Analyst III
8	IT Technicians III
9	IT Technicians II
<u>2</u>	IT Technicians I
40	Positions
40.0	Staff Years

Radio Center Services

1	Network/Telecom Analyst IV
2	Engineers II
1	Communications Engineer
3	Communications Technicians
1	Electronic Equipment Supervisor
2	Electronic Equipment Technicians II
1	Assistant Buyer
<u>1</u>	Account Clerk II
12	Positions
12.0	Staff Years

() Denotes new positions
 Italics indicate Fund 505, Technology
 Infrastructure Services positions.

FUND 505

TECHNOLOGY INFRASTRUCTURE SERVICES

Agency Mission

To provide the underlying technology required to assist County agencies in providing effective support to the citizens.

Agency Summary					
Category	FY 2000 Actual	FY 2001 Adopted Budget Plan	FY 2001 Revised Budget Plan	FY 2002 Advertised Budget Plan	FY 2002 Adopted Budget Plan
Authorized Positions/Staff Years					
Regular	66/ 66	66/ 66	66/ 66	66/ 66	66/ 66
Expenditures:					
Personnel Services	\$3,970,919	\$4,589,024	\$4,360,989	\$4,921,633	\$4,970,849
Operating Expenses	7,446,641	7,110,167	10,368,526	14,913,629	13,513,629
Capital Equipment	3,952,423	2,471,131	2,006,940	1,022,620	1,022,620
Total Expenditures	\$15,369,983	\$14,170,322	\$16,736,455	\$20,857,882	\$19,507,098

Board of Supervisors' Adjustments

The following funding adjustments reflect all changes to the FY 2002 Advertised Budget Plan, as approved by the Board of Supervisors on April 30, 2001:

- The 1.0 percent cost-of-living adjustment approved by the Board of Supervisors, and previously held in reserve, has been spread to County agencies and funds. This action results in an increase of \$49,216 to Fund 505, Technology Infrastructure Services.
- A decrease of \$1,400,000 as part of the \$15.8 million Reductions to County Agencies and Funds approved by the Board of Supervisors. This reduction results in a decrease of \$1,400,000 in Operating Expenses for the second year of re-cabling County buildings to support Countywide applications, resulting in delayed implementation of the upgrade of existing infrastructure to operate current and future applications.

The following funding adjustments reflect all approved changes to the FY 2001 Revised Budget Plan from January 1, 2001 through April 23, 2001. Included are all adjustments made as part of the FY 2001 Third Quarter Review:

- A decrease of \$228,035 due to savings in Personnel Services attributable to greater than anticipated position turnover. This savings is completely offset by a reduction in anticipated revenue, primarily due to reduced operating requirements in the Radio Center, which generates revenue based on work performed for other County agencies.

FUND 505

TECHNOLOGY INFRASTRUCTURE SERVICES

County Executive Proposed FY 2002 Advertised Budget Plan

Purpose

The Department of Information Technology (DIT) coordinates all aspects of information technology for the County and plays an enabling role in advancing the strategic value of technology to transform work processes and provide quality services to customers. Funding for DIT activities is included in the General Fund and in two Funds that DIT manages. Fund 505, Technology Infrastructure Services, includes technology activities performed for County agencies, such as Data Center operations, enterprise data communications network, Radio Center services, and E-911 communications. Fund 104, Information Technology, funds major information technology projects including those with Countywide strategic importance, such as infrastructure and application system modernization initiatives.

All Fund 505 costs are recovered from its customers, and expenditures are primarily driven by customers' requests for information technology (i.e., improved public safety radio system, enhanced telecommunication services, expanded mainframe storage, etc.).

Technology Infrastructure Services provides intra-governmental services including the operation and maintenance of the County computer center 24 hours a day, seven days per week, maintaining the County data and radio communication networks, and providing integrated communication service to all County agencies and outside customers. In FY 2002, a 5.0 percent surcharge to Infrastructure Charges will be continued in order to rebuild reserves for the future replacement and upgrade of mainframe computer equipment.

DIT also manages a PC replacement fund in Fund 505. For each PC replaced, an amount of \$600 is collected per year over a period of four years, based on the estimated life cycle and future replacement cost. This reserve will ensure that funding is available for future replacements to remain consistent with the advancements in technology.

DIT is responsible for coordinating radio repair and engineering support to County agencies and the Fairfax County Public School system. In FY 2002, DIT will maintain 75 base stations, 3,350 portable radios, and 6,100 mobile units utilizing both County employees and contracts with outside vendors. Operational maintenance of the radio network is of primary importance to the County public safety agencies, public works agencies, Fairfax County Public Schools, and other County agencies.

Key Accomplishments

- ◆ Ensured Y2K compliance for the entire County technology infrastructure.
- ◆ Completed the Ethernet conversion of the Government Center and Massey campuses.
- ◆ Upgraded the County's data communications network including a bandwidth upgrade to frame relay, nearly quadrupling the network capacity of the Wide Area Network.
- ◆ Conducted an audit of the telecommunications account resulting in \$120,000 of billing credits.
- ◆ Initiated a project to re-cable County buildings to ensure adequate infrastructure to operate current and future applications.
- ◆ Purchased, configured and installed thousands of PC's under the PC Replacement Program to replace obsolete equipment.
- ◆ Completed the migration of Microsoft Exchange to all County desktop computers.

FUND 505

TECHNOLOGY INFRASTRUCTURE SERVICES

- ◆ Upgraded the Wide Area Network to allow satellite Human Services agencies greater bandwidth for application and server support.
- ◆ Initiated the installation of Storage Area Networks (SANs) to begin a comprehensive storage program for County data.
- ◆ Reorganized the Technology Infrastructure Services Division to provide more efficient services.

FY 2002 Initiatives

- ◆ Improve overall IT infrastructure to support IT initiatives and technology usage.
- ◆ Design and implement a centralized approach to managing the County's network.
- ◆ Design, develop and implement a process to migrate to the newest version of Microsoft Windows, Exchange, and Office Suite, upgrading the 1997 version currently used.
- ◆ Purchase, configure and install 1,740 PC's under the PC Replacement Program, replacing obsolete equipment. The County program currently operates on a four year cycle and includes over 9,000 personal and laptop computers which have been phased in during the life of the program.
- ◆ Continue to leverage SAN storage capacity across technology systems to meet the expanding storage needs of County data in an efficient and streamlined manner.
- ◆ Ensure ample capacity for the County mainframe by upgrading the mainframe processor and related software as utilization increases.
- ◆ Initiate a five year network equipment replacement program, to replace obsolete equipment, allow for proactive monitoring and maintenance, and ensure maximum security protection of County data.
- ◆ Continue the upgrade of the Wide Area Network (WAN) to permit increased network speed and bandwidth availability for current and future applications due to the increasing technical complexity and needs for data exchange between the applications. The upgrade will also provide redundancy to proactively create various network paths for data to ensure continuity of service during unforeseen network problems.

Funding Adjustments

The following funding adjustments from the FY 2001 Revised Budget Plan are necessary to support the FY 2002 program:

- ◆ An increase in Personnel Services of \$332,609, including \$227,006 in exempt limited term salaries for additional personal computer desktop support and \$105,603 associated with salary adjustments necessary to support the County's compensation program.
- ◆ An increase of \$3,832,600 for the replacement purchase for agency personal computers through the PC Replacement Program, which is no longer a Capital Equipment expense. This funding will replace over 1,500 personal and laptops computers that have reached the fourth year of the four-year program cycle.
- ◆ An increase of \$1,900,000 for the second year of the re-cabling of the Government Center Complex, Massey Campus and remote sites to support Countywide applications. The upgrade of the existing infrastructure will enable County users to access software applications and mainframe systems in an efficient manner.

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TECHNOLOGY INFRASTRUCTURE SERVICES

- ◆ A net increase of \$1,688,017 primarily to support an increase in telecommunication charges due to increased bandwidth required for the Wide Area Network (WAN) and prior year actual data, and network hardware.
- ◆ Capital Equipment funding totals \$1,022,620 including \$610,000 for upgrades to the mainframe funded through the Computer Equipment Replacement Fund (CERF), including additional capacity, and upgrades to the operating system software and \$412,620 for equipment to upgrade the WAN.

The following funding adjustments reflect all approved changes to the FY 2001 Revised Budget Plan since passage of the FY 2001 Adopted Budget Plan. Included are all adjustments made as part of the FY 2000 Carryover Review and all other approved changes through December 31, 2000:

- ◆ As part of the FY 2000 Carryover Review, an net increase of \$2,794,168 including an appropriation of \$2,378,969 from the PC Replacement Reserve to fund the mission essential work of replacing obsolete equipment and encumbered carryover of \$415,199.

Objectives

- ◆ To improve the availability of the County's enterprise data network by 0.04 percentage points from 99.95 percent to 99.99 percent.

Performance Indicators

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 1998 Actual	FY 1999 Actual	FY 2000 Estimate/Actual	FY 2001	FY 2002
Output:					
Enterprise data network available hours per year	8,660	8,710	8,760 / 8,735	8,760	8,760
Help desk calls relating to network problems	1,965	2,074	2,150 / 2,345	2,130	1,993
Megabit of bandwidth in the enterprise network ¹	12.96	18.72	18.72 / 18.72	355.00	355.00
Efficiency:					
Cost per megabit of bandwidth ²	\$37,650	\$33,021	NA / \$49,149	\$3,873	\$3,817
Service Quality:					
Average time to resolve help desk calls related to network problems (hrs)	8.50	7.10	4.00 / 3.97	3.00	2.00
Outcome:					
Enterprise data network availability as a percentage of scheduled hours the system is to be operational	98.86%	99.79%	NA / 99.50%	99.95%	99.99%

¹ The FY 2001 increase in bandwidth is a result of Wide Area Network (WAN) upgrades to meet capacity needs of remote sites.

² The FY 2001 decrease cost per megabit is associated with the WAN upgrade. The change in technology allows an increase in bandwidth but with a decrease in the cost per individual unit of bandwidth. For example, the cost per megabit at the Government Center complex was reduced from \$267/megabit to \$48/megabit. The extrapolation across the total WAN results in significant cost reduction.

FUND 505

TECHNOLOGY INFRASTRUCTURE SERVICES

FUND STATEMENT

Fund Type G50, Internal Service Funds

Fund 505, Technology Infrastructure Services

	FY 2000 Actual	FY 2001 Adopted Budget Plan	FY 2001 Revised Budget Plan	FY 2002 Advertised Budget Plan	FY 2002 Adopted Budget Plan
Beginning Balance	\$5,743,601	\$4,186,748	\$5,293,204	\$5,544,240	\$5,544,240
Revenue:					
Radio Services Charges	\$675,823	\$880,592	\$652,557	\$791,597	\$791,597
PC Replacement Charges	4,398,600	4,914,100	4,914,100	5,512,800	5,512,800
DIT Infrastructure Charges					
County Agencies and Funds	8,831,466	10,132,036	10,132,036	13,894,005	12,494,005
Fairfax County Public School:	770,034	1,028,452	1,028,452	1,140,457	1,140,457
Outside Customers	243,663	260,346	260,346	228,536	228,536
Subtotal DIT Infrastructure Charges	\$9,845,163	\$11,420,834	\$11,420,834	\$15,262,998	\$13,862,998
Total Revenue	\$14,919,586	\$17,215,526	\$16,987,491	\$21,567,395	\$20,167,395
Total Available	\$20,663,187	\$21,402,274	\$22,280,695	\$27,111,635	\$25,711,635
Expenditures:					
Personnel Services	\$3,970,919	\$4,589,024	\$4,360,989	\$4,506,624	\$4,555,840
Operating Expenses	5,694,916	7,110,167	7,471,577	10,376,716	8,976,716
Capital Equipment	448,235	636,907	669,261	412,620	412,620
Computer Equipment					
Replacement Expenditures	3,104,963	1,289,400	3,668,369	4,251,922	4,251,922
Schools Computer					
Equipment Replacement	973,615	0	0	0	0
Capacity Upgrade to					
Mainframe Computer	1,177,335	544,824	566,259	1,310,000	1,310,000
Subtotal Expenditures	\$15,369,983	\$14,170,322	\$16,736,455	\$20,857,882	\$19,507,098
COLA Reserve	0	0	0	49,216	0
Total Expenditures	\$15,369,983	\$14,170,322	\$16,736,455	\$20,907,098	\$19,507,098
Total Disbursements	\$15,369,983	\$14,170,322	\$16,736,455	\$20,907,098	\$19,507,098
Ending Balance	\$5,293,204	\$7,231,952	\$5,544,240	\$6,204,537	\$6,204,537
Infrastructure Replacement					
Reserve (CERF) ¹	1,472,142	370,623	687,092	86,511	86,511
PC Replacement Reserve ²	3,821,062	6,861,329	4,857,148	6,118,026	6,118,026
Unreserved Balance	\$0	\$0	\$0	\$0	\$0

¹ A 5.0 percent surcharge on Infrastructure Charges is applied to build long-term reserves for scheduled replacement of mainframe computer and network assets. The funds are held in this computer equipment replacement fund (CERF).

² The balance in the PC Replacement Reserve fluctuates annually based on scheduled PC replacements which are on a four year replacement cycle.